## INTERNATIONAL SEARCH REPORT

| Intern a | M | Application No |  |
|----------|---|----------------|--|
| PCT/US   |   | 99/04494       |  |

Relevant to claim No.

| A CLACO | FICATION OF SUBJECT MATTER<br>A61F9/007 |
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According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols) IPC 6 A61F A61N A61B A61C

Category Citation of document, with indication, where appropriate, of the relevant passages

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Documentation searched other than minimum documentation to line extent that such documents are included in the fields searched

Electronic data base consulted during the international sourch (name of data base and, where practical, search terms used)

| Category -  | Citation of document, with incitation, where appropriate, of ti  | ne reievark passages  | Helevant to claim No.   |
|---|--|---|---|
| Υ   | US 4 156 187 A (BRUMBACH JOSEP<br>22 May 1979<br>see column 10, line 40 - line<br>see column 14, line 35 - line  | 44; figure 1<br>37  | 1-5,<br>7-12,<br>14-17,<br>19-21  |
| Υ   | see column 14, line 58 - line WO 92 07622 A (BSD MEDICAL COR 14 May 1992   |   | 1-5,<br>7-12,<br>14-17,<br>19-21  |
|   | see page 31, line 10 - line 25<br>see page 32, line 33 - line 36<br>12,13  |   |   |
|   | ther documents are listed in the continuation of box C.  | Patent family members are listed  | in annex.   |
| "A" docum<br>consis<br>"E" earlier<br>filing<br>"L" docum<br>which<br>citatio<br>"O" docum<br>other | ategories of steel documents: a<br>seed deling the general state of the art which is not<br>dented to see of particular relevance<br>documents but published on or affect the international<br>date.<br>As the seed of the seed of the seed of the seed of the<br>seed of the seed of the seed of the seed of the<br>seed of the seed of the seed of the seed of the<br>or or other seed of the seed of the<br>or or other seed of the seed of the<br>or other seed of the seed of the<br>or other seed of the<br>or of the seed of the<br>or other seed of the<br>or other<br>or other seed of the<br>or other<br>or other<br>other<br>or other<br>or other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>other<br>othe | T later document published after the his<br>or printing date and not norther with<br>cheet to understand the principle or the<br>cheet or understand the principle or the<br>cheet of the cheet of published the cheet of<br>cannot be considered novel or cannot<br>be considered to write the cheet<br>cannot be considered to encode an in<br>document to combined with one or in<br>document to combined with one or in<br>the act. | the application but<br>soory underlying the<br>blaimed invention<br>the considered to<br>cument is taken alone<br>talamed invention<br>wentive step when the<br>recother such docu-<br>us to a person skilled |
| Date of the   | actual completion of the international search  | Date of mailing of the international se   | arch report   |
| 3   | 31 May 1999  | 07/06/1999  |   |
| Name and  | mailing address of the ISA<br>European Patent Office, P.B. 5818 Patentiaan 2<br>NI 2290 HV Rijswijk<br>Tet (+31-70) 340-2040, Tx. 31 651 epo nl,<br>Fax: (+31-70) 340-3015   | Authonzed officer  Mayer, E   |   |
| om PCTIISA  | (210 (second sheet) (July 1992)  |   |   |

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## INTERNA CIONAL SEARCH REPORT

Inter: 181 Application No PCT/US 99/04494

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT Category 1 Citation of document, with Indication, where appropriate, of the relevant passages Relevant to claim No. US 3 693 613 A (KELMAN CHARLES) Α 1,7,14 26 September 1972 see column 5, line 1 - line 8; figure 4 US 5 569 188 A (MACKOOL RICHARD J) Α 6.13.18 29 October 1996 see column 5, line 6 - line 17; figure 2

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## INTERNATIONAL SEARCH REPORT

...ormation on patent family members

Interr .al Application No PCT/US 99/04494

| Patent document<br>cited in search report |   | Publication<br>date | Patent family<br>member(s)   |   | Publication date   |  |
|---|---|---------------------|--|---|--|--|
| US 4156187                                | А | 22-05-1979          | US 4180074 A CA 1092657 A DE 2758909 A FR 2383649 A GB 1591637 A JP 53114285 A US 4184510 A US 4189286 A |   | 25-12-1979<br>30-12-1980<br>21-09-1978<br>13-10-1978<br>24-06-1981<br>05-10-1978<br>22-01-1980<br>19-02-1980 |  |
| WO 9207622                                | A | 14-05-1992          | US<br>AU<br>CA<br>EP<br>JP   | 5344435 A<br>9037891 A<br>2095517 A<br>0556299 A<br>6501411 T | 06-09-1994<br>26-05-1992<br>06-05-1992<br>25-08-1993<br>17-02-1994   |  |
| US 3693613                                | A | 26-09-1972          | NONE   |   |  |  |
| US 5569188                                | Α | 29-10-1996          | AU<br>WO   | 5540796 A<br>9632144 A  | 30-10-1996<br>17-10-1996   |  |